AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1-23 (Canceled)
- 24. (New) An anti-corrosion and anti-metal sulfide scale formulation for use in the treatment of corrosion and metal sulfide scale deposits in aqueous systems, said formulation comprising a THP⁺ salt and a primary, secondary or tertiary alcohol having an acetylenic bond in the carbon backbone.
- 25. (New) The formulation as claimed in Claim 24, wherein the acetylenic bond is adjacent to the hydroxyl group, said alcohol having the general formula (I):

$$R^1 C = C C R^2 R^3 OH$$
 (I)

wherein:

- R^1 , R^2 and R^3 being the same or different, each independently represent hydrogen, C_1 to C_8 alkyl or functionally-substituted alkyl.
- 26. (New) The formulation as claimed in Claim 25, wherein R¹, R² and R³ each independently represent hydrogen or C₁ to C₈ alkyl.
- 27. (New) The formulation as claimed in Claim 26, wherein the alcohol is propargyl alcohol.
- 28. (New) The formulation as claimed in Claim 24 wherein the metal sulfide scale is iron sulfide, lead sulfide or zinc sulfide.

- 29. (New) The formulation as claimed in Claim 24, wherein the THP⁺ salt comprises an anion selected from the group consisting of sulphate, chloride, phosphate, bromide, fluoride, carbonate, citrate, lactate, tartrate, borate, silicate, formate and acetate.
- 30. (New) The formulation as claimed in Claim 24, further comprising a surfactant.
- 31. (New) The formulation as claimed in Claim 30, wherein the surfactant is a cationic surfactant.
- 32. (New) The formulation as claimed in Claim 31, wherein the cationic surfactant is selected from the group consisting of quaternary ammonium compounds, N-alkylated heterocyclic compounds, quaternised amido-amines, and amino methane phosphonates.
- 33. (New) The formulation as claimed in Claim 30 wherein the surfactant is selected from the group consisting of anionic, amphoteric and non-ionic surfactants.
- 34. (New) The formulation as defined in Claim 24 for treating corrosion of mild steel, copper or aluminum.
- 35. (New) (New) A method for the treatment of an aqueous system containing or in contact with a metal sulfide scale while concomitantly inhibiting the corrosion of surfaces in contact with said aqueous system, said method comprising the step of adding to said aqueous system a scale and corrosion inhibiting amount of a formulation as defined in Claim 24.
- 36. (New) The method according to Claim 35 wherein the aqueous system is used in enhanced oil recovery.

- 37. (New) The method as claimed in Claim 35 wherein the aqueous system is used in industrial water systems or paper manufacturing systems.
- 38. (New) The method as claimed in Claim 35 wherein the THP⁺ salt is added to the aqueous system in an effective amount of up to 30% by weight.
- 39. (New) An anti-corrosion and anti-metal sulfide scale formulation consisting essentially of the reaction product of a THP⁺ salt and a primary, secondary or tertiary alcohol having an acetylenic bond in the carbon backbone with a ratio of said THP⁺ salt and said acetylenic alcohol of between 1:1 and 750:1.
- 40. (New) The formulation as claimed in Claim 24, having a ratio of the THP⁺ salt to the acetylenic alcohol of between 1:1 and 750:1.
- 41. (New) The formulation as claimed in Claim 40 wherein the ratio is between 15:1 and 300:1.
- 42. (New) The formulation as claimed in Claim 41 wherein the ratio is about 40:1.